IBM Personal System/2 Model 80 386

A powerful floorstanding system—with plenty of room to grow

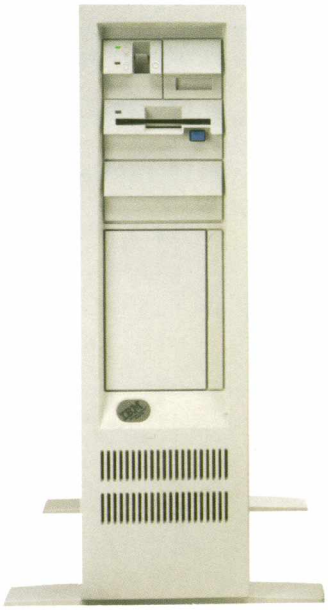
Ideal as a LAN server or as a standalone workstation, the IBM Personal System/2® Model 80 386 has the performance and expandability you need now and in the future. Use it to service many network stations, manage file and device resources efficiently, and serve as a host gateway. Or use it as a powerful workstation for advanced graphics and imaging, multimedia or engineering/scientific applications. And because it offers exceptional room for growth, the Model 80 386 is an excellent investment for today and tomorrow.

Micro Channel® architecture and a built-in Small Computer System Interface (SCSI) combine to ensure balanced performance from the 80386™ processor, memory and file storage devices. What's more, this system can serve large information networks—it accommodates three extra fixed disk drives for up to 1.28GB of high-speed data storage. And with seven available feature card slots and the expandability offered by SCSI, the Model 80 can grow as your business grows—and deliver the performance you need along the way.

Model 80 at work

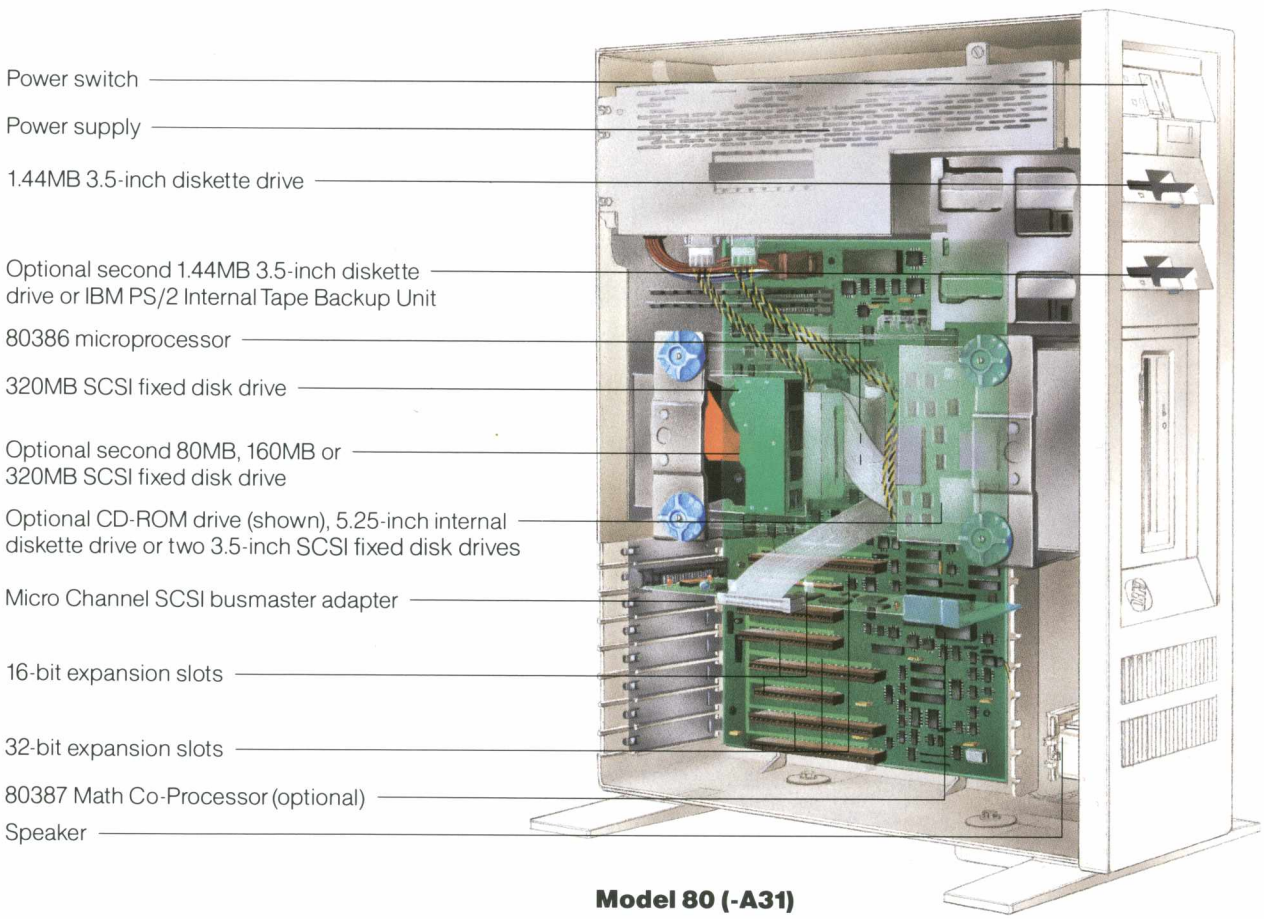
Here are some of the ways you can put Model 80 to work for you:

- Benefit from reliable, fast file access when Model 80 acts as a network server or host gateway
- Process large engineering or scientific models and drawings with ease
- Support several applications at once—even support many users—in a multitasking/multiuser environment
- Handle complex desktop publishing and/or advanced graphics and imaging jobs
- Get exciting new multimedia capabilities with optional high-resolution graphics, video capture and stereo sound
- Manage large databases and CD reference libraries for network sharing



IBM

Feature	Benefit
Intel® 20 or 25 MHz, 32-bit 80386 microprocessor	• Provides fast processor performance and data transfer operations
Built-in SCSI busmaster adapter card	• Permits efficient file management of multiple disk drives • Lets you add up to seven SCSI-compatible devices on a single adapter
Standard memory of 4MB	• Gives you plenty of workspace for programs and data
Micro Channel architecture	• Provides efficient and reliable platform for multitasking environment • Enables concurrent operation of processor and busmaster functions • Allows for easy setup and reconfiguration without requiring manual switch setting
Six file storage bays	• Give you the ability to add a variety of internal storage devices, such as a CD-ROM, a 5.25-inch diskette drive, a tape backup device, and additional high-performance fixed disk drives • Let you use up to four internal fixed disk drives for a capacity of over one billion bytes of data
Seven available expansion slots	• Provide extensive system enhancement and growth capabilities for more memory, advanced graphics, special peripheral devices, communications features, and even other processor cards
High-performance DASD	• Enables faster access to programs and data • Works with SCSI busmaster for more balanced performance and optimized system throughput
Built-in VGA graphics	• Support any PS/2® analog display • Provide 640 x 480 addressability for high-quality graphics and text • Give you a total palette of over 256,000 colors


Power switch
Power supply
1.44MB 3.5-inch diskette drive
Optional second 1.44MB 3.5-inch diskette drive or IBM PS/2 Internal Tape Backup Unit
80386 microprocessor
320MB SCSI fixed disk drive
Optional second 80MB, 160MB or 320MB SCSI fixed disk drive
Optional CD-ROM drive (shown), 5.25-inch internal diskette drive or two 3.5-inch SCSI fixed disk drives
Micro Channel SCSI busmaster adapter
16-bit expansion slots
32-bit expansion slots
80387 Math Co-Processor (optional)
Speaker

Model 80 (-A31)

IBM Personal System/2 Model 80 386 at a glance

Machine numbers	8580-081	8580-161	8580-321
Microprocessor			
Standard	80386	80386	80386
Clock speed	20 MHz	20 MHz	20 MHz
Wait states	1	1	1
Memory cache size	—	—	—
Optional	80387	80387	80387
Clock speed	20 MHz	20 MHz	20 MHz
Part number	6450378	6450378	6450378
Bus architecture	Micro Channel	Micro Channel	Micro Channel
Data path	32-bit	32-bit	32-bit
Memory (RAM)			
Standard	4MB (80ns)	4MB (80ns)	4MB (80ns)
Maximum on system board	4MB	4MB	4MB
System maximum	16MB	16MB	16MB
Integrated functions	Video Graphics Array (VGA) and display port, serial port, parallel port, pointing device port, keyboard port, diskette controller, clock/calendar, SCSI adapter (includes fixed disk support), security password feature		
Available expansion slots	Three 32-bit, four 16-bit	Three 32-bit, four 16-bit	Three 32-bit, four 16-bit
Diskette storage (internal)			
Standard (3.5-inch)	1.44MB	1.44MB	1.44MB
Optional (3.5-inch)	2nd 1.44MB	2nd 1.44MB	2nd 1.44MB
Optional (5.25-inch)	1.2MB	1.2MB	1.2MB
Diskette storage (external)			
Optional (5.25-inch)	360KB or 1.2MB	360KB or 1.2MB	360KB or 1.2MB
Fixed disk storage			
Standard	80MB (17ms)	160MB (16ms)	320MB (12.5ms)
Optional SCSI	Up to three additional 80MB, 160MB or 320MB internal drives		
Display modes	VGA (includes all EGA, CGA and MCGA modes)		
Text	360 or 720 x 400; 9 x 16 pel character matrix; 80 columns x 25 rows; up to 16 colors		
Graphics	320 x 200 x 256 colors or 64 gray shades; 640 x 480 x 16 colors or 16 gray shades; palette of 256,000 colors or 64 gray shades		
Optional graphics	Expanded graphic modes, including 1,024 x 768 x 256 colors, are supported via the optional PS/2 Display Adapter 8514/A or PS/2 XGA Display Adapter/A and related features; higher resolution modes are supported by the PS/2 Image Adapter/A series		
Supported displays	IBM Personal System/2 Color Displays 8512, 8513, 8514 and 8515; IBM Personal System/2 Monochrome Displays 8503, 8506,[4] 8507 and 8508[4]		
Supported printers/ plotters	IBM Proprinter® family, IBM Quickwriter,® IBM Quietwriter® III, IBM ExecJet,™ IBM LaserPrinter family, IBM Page Printer 3812/3816, IBM 618X and 737X Color Plotters		
Keyboard	101 keys, including 12 function keys, 3 lighted mode indicators; 6-foot coiled cable		
Power supply	225-watt	225-watt	225-watt
Operating systems	DOS 3.3 or higher, IBM Operating System/2® Standard or Extended Edition 1.2 or 1.3, AIX® Personal System/2 1.2.1		
Size	Approx. 23.5"H x 6.5"W x 19.0"D (597mm x 166mm x 482mm); 45.3 lbs. (20.6 kg)		
Warranty	One-year limited warranty		

IBM Personal System/2 Model 80 386 at a glance

Machine numbers	8580-A16	8580-A31
Microprocessor		
Standard	80386	80386
Clock speed	25 MHz	25 MHz
Wait states	0–2	0–2
Memory cache size	64KB	64KB
Optional	80387	80387
Clock speed	25 MHz	25 MHz
Part number	6450607	6450607
Bus architecture	Micro Channel	Micro Channel
Data path	32-bit	32-bit
Memory (RAM)		
Standard	4MB (80ns)	4MB (80ns)
Maximum on system board	8MB	8MB
System maximum	16MB	16MB
Integrated functions	Video Graphics Array (VGA) and display port, serial port, DMA parallel port (-A16, -A31), pointing device port, keyboard port, diskette controller, clock/calendar, SCSI adapter (includes fixed disk support), security password feature	
Available expansion slots	Four 32-bit, three 16-bit	Four 32-bit, three 16-bit
Diskette storage (internal)		
Standard (3.5-inch)	1.44MB	1.44MB
Optional (3.5-inch)	2nd 1.44MB	2nd 1.44MB
Optional (5.25-inch)	1.2MB	1.2MB
Diskette storage (external)		
Optional (5.25-inch)	360KB or 1.2MB	360KB or 1.2MB
Fixed disk storage		
Standard	160MB (16ms)	320MB (12.5ms)
Optional SCSI	Up to three additional 80MB, 160MB or 320MB internal drives	
Display modes	VGA (includes all EGA, CGA and MCGA modes)	
Text	360 or 720 x 400; 9 x 16 pel character matrix; 80 columns x 25 rows; up to 16 colors	
Graphics	320 x 200 x 256 colors or 64 gray shades; 640 x 480 x 16 colors or 16 gray shades; palette of 256,000 colors or 64 gray shades	
Optional graphics	Expanded graphic modes, including 1,024 x 768 x 256 colors, are supported via the optional PS/2 Display Adapter 8514/A or PS/2 XGA Display Adapter/A and related features; higher resolution modes are supported by the PS/2 Image Adapter/A series	
Supported displays	IBM Personal System/2 Color Displays 8512, 8513, 8514 and 8515; IBM Personal System/2 Monochrome Displays 8503, 8506,[4] 8507, and 8508[4]	
Supported printers/ plotters	IBM Proprinter family, IBM Quickwriter, IBM Quietwriter III, IBM ExecJet, IBM LaserPrinter family, IBM Page Printer 3812/3816, IBM 618X and 737X Color Plotters	
Keyboard	101 keys, including 12 function keys, 3 lighted mode indicators; 6-foot coiled cable	
Power supply	242-watt	242-watt
Operating systems	DOS 3.3 or higher, IBM Operating System/2 Standard or Extended Edition 1.2 or 1.3, AIX Personal System/2 1.2.1	
Size	Approx. 23.5"H x 6.5"W x 19.0"D (597mm x 166mm x 482mm); 45.3 lbs. (20.6 kg)	
Warranty	One-year limited warranty	

Why PS/2?

Here are some of the reasons why PS/2 stands out as the best solution for your business needs.

Technological leadership through Micro Channel architecture, integrated construction and advanced design (by combining Very Large Scale Integration and Surface Mount Technology), and SCSI support for large data storage.

Extensive communications capabilities—through a wide range of connectivity options—provide concurrent support for intelligent communications adapters and coprocessors, thanks to Micro Channel architecture.

Compatibility and expandability to protect your investment since the PS/2s you have today work with existing products and programs and with those you'll need tomorrow.

Service and support that provide you with everything from fast parts delivery to onsite services to system planning to 24-hour phone support—all at a competitive price.

Business Partners who enhance PS/2 capabilities by helping customers choose, customize and configure hardware and software to meet a range of needs.

Quality and reliability that ensure PS/2s are built to perform smoothly and dependably year after year.

Wide range of options[1]

	Part no.[2]
Coprocessor	
Wizard Adapter	34F3062
Storage devices	
3.5" 1.44MB 1-inch High Diskette Drive	6451072
5.25" 1.2MB Internal Diskette Drive	6451006
5.25" 1.2MB External Diskette Drive	4869002
5.25" 360KB External Diskette Drive	4869001
80MB SCSI Fixed Disk Drive	6451045
160MB SCSI Fixed Disk Drive	6451046
320MB SCSI Fixed Disk Drive	6451108
CD-ROM Drive (internal)	6451113
External CD-ROM Drive	3510001
6157 Streaming Tape Drive (60MB, 150MB)	6157001/ 6157002
Internal Tape Backup Unit	30F5279
3363 Internal Optical Disk Drive	63X4166
3363 Optical Disk Drive (-A11, -B01)	68X7946/ 63X4182
SCSI Storage Enclosure	35100V0
External Enclosure for SCSI Devices	3511003
Scanners	
3117, 3118 Scanners	3117010/ 3118010
3119 PageScanner	94X2410
Connectivity/communications	
Token-Ring Network Adapter/A	69X8138
Token-Ring Network 16/4 Adapter/A	16F1133
Token-Ring Network 16/4 Trace and Performance Adapter/A	74F5130
Adapter/A for Ethernet Networks	6451091
PC Network Baseband Adapter/A	1501223
PC Network Broadband Adapter II/A	1501222
PC Network Adapter II/A—Frequency 2	96X5647
PC Network Adapter II/A—Frequency 3	96X5648
Dual Async Adapter/A	6451013
Multi-Protocol Adapter/A	6451003
Realtime Interface Co-Processor (RIC) Multiport/2	09F1897/ 16F1820[3]
RIC Portmaster Adapter/A and related features	53F2601/ 604/607[3]
X.25 Interface Co-Processor/2	16F1858
3270 Connection	74F3465
300/1200/2400 Internal Modem/A	94X1755
300/1200 Internal Modem/A	6450349
Leased Line Modem	26F1862
System 36/38 W/S Emulation Adapter/A	69X6279
Display Station Emulation Adapter/A	92X0743
System/370™ Channel Emulation Adapter/A	06F3160
Graphics and multimedia	
XGA Display Adapter/A	75X5887
Image Adapter/A	44F9914[3]
Audio Capture/Playback Adapter/A	34F2784
Video Capture Adapter/A	34F2785
M-Motion Video Adapter/A	34F3087
Other features	
Micro Channel SCSI Adapter	6451109
Micro Channel SCSI Adapter with cache	6451110
Mouse	6450350

Memory matrix tables

Memory on system board	Model 80 -081, -161, -321	Model 80 -A16, -A31
Standard memory	4MB	4MB
Maximum memory	4MB	8MB
System board memory expansion kits	—	4MB (6451060)
Number of memory kits that can be added on system board	—	1
Memory configurations possible on system board	—	4MB, 8MB

Memory options (cards)			
Memory expansion card (size) and capacity range	2–8MB (6450605)	2–14MB (34F3077)	4–14MB (34F3011)
Memory kits to upgrade card			
1MB kit	6450603	6450603	6450603
2MB kit	6450604	6450604	6450604
4MB kit	N/A	87F9977	87F9977
Maximum number of memory kits that can be added to each memory card	3	3	3
Maximum number of memory cards/system	2	1	1
Maximum system memory	16MB	16MB	16MB

Note: A minimum of 2MB of memory must be installed on the system board when using adapter 34F3077 or 34F3011.

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[1]*Additional optional features and devices may be supported.*
[2]*Installation may require features that are not listed, such as adapters, cables and installation kits.*
[3]*There is more than one part number for this type of option, depending on the amount of on-card memory and other functions desired.*
[4]*Supported by PS/2 Image Adapter/A series.*

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